

## Title (en)

ORALLY DELIVERABLE AND ANTI-TOXIN ANTIBODIES AND METHODS FOR MAKING AND USING THEM

## Title (de)

ORAL VERABREICHBARE UND ANTI-TOXIN-ANTIKÖRPER UND HERSTELLUNGS- UND ANWENDUNGSVERFAHREN DAFÜR

## Title (fr)

ANTICORPS ANTITOXINES D'ADMINISTRATION ORALE ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION

## Publication

**EP 1833510 A4 20100210 (EN)**

## Application

**EP 05857223 A 20051222**

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## Abstract (en)

[origin: WO2006071877A2] The invention provides antibodies with superior therapeutic efficacy and related methods of engineering such antibodies to increase their stability and resistance to proteases, e.g., in the digestive tract. Protease cleavage motifs are identified and subsequently modified to reduce or eliminate cleavage at that site. Methods of employing these orally deliverable antibodies as therapeutic compositions, particularly against gastrointestinal pathogens are also provided herein. In one aspect, the invention provides combinations of monoclonal antibodies, e.g., "synthetic polyclonals", that work synergistically to neutralize bacterial toxins, particularly enteric bacterial toxins such as Clostridium difficile toxin A.

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## Citation (search report)

- [X] BATTEN MARGARET R ET AL: "Amino acid sequence requirements in the hinge of human immunoglobulin A1 (IgA1) for cleavage by streptococcal IgA1 proteases.", INFECTION AND IMMUNITY MAR 2003, vol. 71, no. 3, March 2003 (2003-03-01), pages 1462 - 1469, XP002561561, ISSN: 0019-9567
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- See references of WO 2006071877A2

## Citation (examination)

M. NAGAOKA ET AL: "Single amino acid substitution in the mouse IgG1 Fc region induces drastic enhancement of the affinity to protein A", PROTEIN ENGINEERING DESIGN AND SELECTION, vol. 16, no. 4, 1 April 2003 (2003-04-01), pages 243 - 245, XP055009600, ISSN: 1741-0126, DOI: 10.1093/proeng/gzg037

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